

## ABSTRACT

A second battery charging apparatus includes a voltage detecting circuit, a current detecting circuit, a charging circuit, and a charge control circuit. The voltage detecting circuit detects a battery voltage of the second battery and accordingly outputs a signal. The current detecting circuit detects a battery current supplied to the second battery and accordingly outputs a signal. The charging circuit executes a current supply control to perform the charging to the second battery such that the battery voltage becomes equal to a voltage predetermined based on control signals and also that the charging current becomes equal to a current predetermined based on the control signals. The charge control circuit instructs the charging circuit with the control signals to set the battery voltage and the charge current in response to a voltage indicated by the signal from the voltage detecting circuit.